"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

ACC NR: AP6029225

obtained for pure KNO_3. The SO_4^{2-} additive did not affect the radiative yield of potassium nitride as compared with pure KNO_3. The process of nitrite radiolysis is discussed in terms of the free radical mechanism. Orig. art. has: 2 figures, 1 table, 1 formula.

SUB CODE: 07,18/ SUBM DATE: 09Jun65/ ORIG REF: 003/ OTH REF: 020

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKHINA, YE. T. PA 49/49T60

USSR/Medicine-Industry and Occupation, Hygiene Oct 42
Medicine-Aerosol, Effect of

"New Data on the Problem of Aerosol Retention During Respiration," I.I. Livshits, Ye. T. Lykhina, G.S. Erenburg, Dept of Labor Hygiene, Lab of Aerosols, Leningrad Inst of Labor Hygiene and Occupational Diseases, 8 pp

"Gig i San" No 10

Details experimental results from studies on (1) Retention and condensation of aerosol during respiration, (2) aerosol disintegration, and (3) relationship between amount of aerosol retained during respiration and electric charge of aerosol particles. Tables show extent of retention of various types of respiration. Includes two microscopic illustrations.

PA 49/49T60

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKHINA, E. T., ERENBURG, G. S., KRASNOGORSKAIA, M. N., LIFSCHITZ, I. I.

Gravimetric and quantitative methods of determination of dust in industry. Gig. sanit., Moskva No. 7, July 50. p. 3-5

1. Of the Aerosol Laboratory, State Scientific-Research Institute of Labor Hygiene and Occupational Diseases in Leningrad.

CLML 19, 5, Nov., 1950

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LAZAREV, N.V.; ALEKSANDROV, I.S.; LYUBLINA, Ye.I.; AKKERBERG, I.I.; ZAKA-
BUNINA, M.S.; GADASKINA, I.D.; DOBRYAKOVA, N.S.; KREPS, I.F.; KARASIK,
V.M.; LEVINA, E.N.; DANISHEVSKIY, S.L.; YEGOROV, N.M.; RYLOVA, M.L.,
starshiy nauchnyy sotrudnik; KAHPOV, B.D.; ANDREYEV, V.V.; LYKHINA,
Ye.T.; ZAMESHAYEVA, G.I.; ANISIMOV, A.N.; FRIDLYAND, I.G.; DANETSKAYA,
O.L.; BOGOVSKIY, P.A.; TIUNOV, L.A.; MIKHEL'SON, M.Ya.; ABRAMOVA, Zh.I.,
GRIGOR'YEVA, L.M.; KLINSKAYA, K.S.

Third Leningrad conference on the problems of industrial toxicology.
Farm.i toks. 16 no.2:59-62 Mr-Ap '53. (MLRA 6:6)
(Poisons)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKHINA, Ye.T.

Possibilities of resorptive action of mineral oils. Farm.i toks. 18 no.2:51-55 Mr-Ap '55. (MLRA 8:7)

1. Laboratoriya aerozoley (zav. -N.K.Bakhusov) i toksikologicheskaya laboratoriya (zav. I.D.Gadaskina) Gosudarstvennogo nauchno-issledovatel'skogo instituta gigiyeny truda i professional'nykh zabolevaniy (Leningrad).

(PETROLEUM PRODUCTS, effects,
oils, resorptive action in animals)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

KOYRANSKIY, Boris Borisovich; LYKHINA, Ye.T., red.; SHEVCHENKO, F.Ya., tekhn.red.

[Tonsillitis and its control under industrial conditions] Angina i bor'ba s nei v proizvodstvennykh usloviiakh. Leningrad, Gos.izd-vo med.lit-ry Medgiz, Leningr.otd-nie, 1960. 86 p. (MIRA 13:12)

(INDUSTRIAL HYGIENE) (LENINGRAD--TONSILS--DISEASES)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

ABRAMOVA, Zh.I., kand. med. nauk; GADASKINA, I.D., prof.; GOLUBEV, A.A., kand. med. nauk; DANISHEVSKIY, S.L., prof.; ZIL'BER, Yu.D., kand. med. nauk; LAZAREV, L.N., kand. khim. nauk; LEVINA, E.N., doktor med. nauk; LOYT, A.O.; LYUBLINA, Ye.I., doktor biol. nauk; LYKHINA, Ye.T., kand. biol. nauk; MINKINA, N.A., kand. med. nauk; RUSIN, V.Ya., kand. med. nauk; SALYAMON, L.S., kand. med. nauk; SPERANSKIY, S.V., TRAKHTENBERG, I.M., dots.; FILOV, V.A., kand. biol. nauk; TSIRK, K.G., kand. med. nauk; CHEKUNOVA. M.P., kand. med. nauk; GRIVA, Z.I., red.; LAZAREV, N.V., zasl.deyat.nauki,prof., red.; LEVIN, S.S., tekhn. red.; BASINA, M.Z., tekhn. red.

[Toxic industrial substances; handbook for chemists, engineers and physicians] Vrednye veshchestva v promyshlennosti; spravochnik dlia khimikov, inzhenerov i vrachei. Izd.4., perer.i dop. Leningrad, Goskhimizdat. Pt.2.[Inorganic and metallo-organic compounds] Neorganicheskie i elementorganicheskie soedineniia. 1963. 619 p. (MIRA 17:2)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

S/613/62/000/019/005/006
B108/B186

AUTHORS: Lykhmus, Ya., Yyglane, Kh.

TITLE: Classification of elementary particles according to their interaction

SOURCE: Akademiya nauk Estonskoy SSR. Institut fiziki i astronomii. Trudy. no. 19. 1962. Issledovaniya po teoreticheskoy fizike. 113-123

TEXT: On the basis of six-dimensional "internal" space, which for each interaction is split up into the sum of two invariant subspaces, one mathematical formulation of the classification of the elementary particles according to their interactions is given. Classifications according to weak four-fermion, electromagnetic, and strong interactions are established. Each of these excludes the remaining two from exact determination. The interaction Lagrangian is invariant with respect to transformations in the "internal" space. This means that the quantum numbers are conserved in interactions according to which the classification was made. There are 4 tables. The English-language references are:

Card 1/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

Classification of elementary ...

M. Gell-Mann. Phys. Rev., 92, 833, 1953; T. Nakano, K. Nishijima, Progr. Theor. Phys., 10, 581, 1953; A. Salam, Nucl. Phys., 2, 173, 1956.

SUBMITTED: December 15, 1961

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

ALEKSEYEVA, R.N., inzhener; LYKHOVITSKIY, I.D., kandidat tekhnicheskikh nauk; RZHEZNIKOV, Yu.V., inzhener.

Method for testing and profiling relatively short turbine blades. Teploenergetika 3 no.6:51-56 Je '56. (MLRA 9:8)

1. Vsesoyuznyy teplotekhnicheskiy institut.
(Blades)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKHVAR', D.F.; SAMCHEVSKAYA, N.S.

Cultivation of marjoram in the Botanical Garden of the Academy of Sciences of the Ukrainian S.S.R. Trudy Bot.sada AN URSR 3:82-89 '55. (MIRA 10:8)

(Kiev--Marjoram)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

22672

24.4200 1327, 1191, 1109

S/198/61/007/002/001/004
D204/D303

AUTHORS: Golubentsev, O.M. and Lykhovyd, P.I. (Kyyiv)

TITLE: The resolvent of the integral equation of motion of systems of a higher order

PERIODICAL: Prykladna mekhanika, v.7, no. 2, 1961, 126-134

TEXT: The authors consider the determination of the resolvent of the integral equation of the transition process for vibrating systems which consist generally of any number of masses with elastic connections. Cases of systems of 4 and 5 masses are discussed. For the general case of n masses: The n differential equation of 2nd order are first reduced to one equation of 2n-th order and then to an integral equation of Volterra's II type, the method being shown only in the example of the 4 mass system. The kernel is

$$K(t,y) = -\sum_{r=0}^{n-2} a_r \frac{(t-y)^{2r+1}}{(2r+1)!}.$$

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22672

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D204/D303

The resolvent of the integral . . .

The second iteration of the kernel is found and put into a recurrent form, then the arbitrary m-th iteration and the resolvent, the latter being

$$R(\tau) = \sqrt{a_0}\left|\sum_{m=1}^{\infty}(-1)^m \underbrace{\sum_{i=0}^{m}\binom{m}{i}\cdots\sum_{j=0}^{m-i-\ldots-l}\binom{m-i-\ldots-l}{j}}_{(n-3)\text{ сумм (sums)}}\times\right.$$

$$\left.\times c_1^l c_2^l\ldots c_{n-3}^l\frac{\tau^{2m+2j+\ldots+2(n-2)k-1}}{[2m+2j+\ldots+2(n-2)k-1]!}+\right.$$

$$+\sum_{m=1}^{\infty}(-1)^m\underbrace{\sum_{k=1}^{m}\binom{m}{k}\sum_{i=0}^{m-k}\binom{m-k}{i}\cdots\sum_{j=0}^{m-k-\ldots-l}\binom{m-k-\ldots-l}{j}}_{(n-2)\text{. сумм (sums)}}\times$$

$$\times c_1^l c_2^l\ldots c_{n-2}^k\frac{\tau^{2m+2j+\ldots+2(n-2)k-1}}{[2m+2j+\ldots+2(n-2)k-1]!}. \qquad (16)$$

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

22672

S/198/61/007/002/001/004
D204/D303

The resolvent of the integral . . .

where $\tau = \sqrt{a_0}(t - y)$. A recurrence formula is given expressing R_n in term of R_{n-1} (resolvent for (n-1) mass system) and the second term of (16). It is intended to show in another paper that for engineering purposes it is sufficient to take into account only 2 or 3 first parameters of the system. There are 2 Soviet-bloc references.

ASSOCIATION: Instytut mekhaniky AN URSR (Institute of Mechanics, AS Ukr SSR)

SUBMITTED: November 29, 1960

Card 3/3

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKHTANOV, A.G.; KOKOVIN, A.A., starshiy prepodavatel'

Using a camera for determining the bed position of geological structures. Sbor. nauch. trud. Kaz GMI no.19:132-135 '60. (MIRA 15:3)

(Mining geology) (Photography--Industrial applications)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

KOTOV, M.I.; LIKHVAR', D.F. [Lykhvar, D.F.]

Mykola Mykolaiovych Hryshko, 1901-1964. Ukr. bot. zhur. 21 no.4: 112-114 '64. (MIRA 17:11)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

SOV/138-59-3-4/16

AUTHORS: Blagov, S.S. (Deceased); Pechkovskaya, K.A.; Lykin, A.S.; Simanovskaya, S.A. and Shmigel'skiy, V.K.

TITLE: Electron-Microscopic Investigations of Rubber Mixtures and Their Basic Components (Elektronno-mikroskopicheskoye issledovaniye rezinovykh smesey i ikh osnovnykh komponentov)

PERIODICAL: Kauchuk i rezina, 1959, Nr 3, pp 12 - 18 (USSR)

ABSTRACT: Most interesting results of electron-microscopic investigations were obtained when analysing natural and synthetic rubbers (Refs 3 to 8). It was possible to determine the sol and gel fractions of natural rubber, the sulphur-structure which is characteristic for rubbers and the relation between the dimensions of spherical components and the molecular weight of the rubber, as well as the characteristics of the secondary structure of crystallising rubbers. During the present investigations the authors used a modified electron microscope EM-100 with a 0.25 mm

Card 1/3

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Electron-Microscopic Investigations of Rubber Mixtures and Their Basic Components

diaphragm (0.05 mm diaphragm aperture) which made it possible to increase the resolving power of the microscope from 100 to 30 Å. Details of the preparation of samples from rubber solutions as well as from hard ru rubbers are given and electron-microscopic tests were carried out on them. Figure 1 shows photographs of a natural rubber film sample; Figure 2 a colloidal replica with an unplasticised butadiene-styrene rubber surface; Figure 3 a quartz replica of an unfilled natural rubber vulcanisate; Figure 4 a quartz replica of unfilled vulcanisate prepared from natural and sodium-butadiene rubber. In all cases the degree of magnification is quoted. Further tests were carried out on various types of activated carbon black. A generator with a special vibrator (15 cycles/second) was used for dispersing the carbon black in alcohol or in toluene (Figure 5). Figures 6 to 9 show micro-photographs of four activated carbon blacks, and a table gives characteristics of their degree of dispersion. Formulae for calculating the average

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

Electron-Microscopic Investigations of Rubber Mixtures and Their Basic Components

diameters are given. Special channel black is used in the manufacture of various types of ink. It is characterised by a high degree of dispersion, and a lesser degree of coarseness than normal channel black. Anthracene black resembles furnace black to a greater degree than channel black. This is confirmed by comparative tests on rubbers containing the two types of carbon black; rubbers containing anthracene black as fillers showed a higher rate of vulcanisation and higher moduli. There are 9 figures, 1 table and 17 references, of which 5 are English, 4 German and 8 Soviet.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti (Scientific Research Institute for the Tyre Industry)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

AUTHORS: Lykin, A. S., Pechkovskaya, K. A. 307/48-23-6-14/28

TITLE: Electron-microscopic Investigations of Vulcanized Products of Natural and Synthetic Rubber (Elektronnomikroskopicheskoye issledovaniye vulkanizatov natural'nogo i sinteticheskikh kauchukov)

PERIODICAL: Izvestiya Akademii nauk SSSR. Seriya fizicheskaya, 1959, Vol 23, Nr 6, pp 725 - 728 (USSR)

ABSTRACT: In the introduction a number of papers (Refs 1-7) are listed, in which the structure of rubber products vulcanized by means of electron microscopes were investigated by means of the replica method. Two further papers (Refs 8,9) are mentioned, in which the thermodynamical compatibility of rubber was investigated, which showed the importance of cohesion energy. It was also found that in mixtures of two different kinds of rubber, their properties do not behave additively. In the present paper the authors describe the carrying out of electron-microscopic work with vulcanized products which have one or two types of rubber as a basis. In the first part of this paper the investigations of pure natural rubber and of three synthetic rubbers are dealt with. For this purpose, the method of quartz-replica

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is used, and an example (Fig 1) is shown of natural rubber enlarged 41000 times. In the second part of the paper the results obtained by investigations carried out of four vulcanized products are dealt with, each of which is composed of two kinds of rubber. These vulcanized products show various forms of microinhomogeneity and size. From the boundaries of these microinhomogeneities conclusions may be drawn as to compatability in that a diffuse boundary indicates better compatibility. There are 3 figures and 9 references, 6 of which are Soviet.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

TARASOVA, Z. N.; DOGADKIN, B. A.; LYKIN, A.S.; KAPLUNOV, M. Ya.; KHOZAK, V. K.; KOZLOV, V. T.; SOBOLEV, V. S.; KLAUZEN, N. A.

"Struktura i svoystva vulkanizatov, poluchennykh kombinirovannym deystviem sery i ioniziruyushchikh izlucheniy."

report submitted for 35th Intl Cong, Industrial Chemistry, Warsaw, 15-19 Sep 64.

Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moscow.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

L 17934-65 EWI(m)/EPF(c)/EPR/EWP(j) Pc-4/Pr-4/Ps-4 ASD(f)-2 RM/WW
ACCESSION NR: AP4049565 S/0069/64/026/006/0697/0704

AUTHOR: Ly*kin, A. S.

TITLE: Effect of vulcanization network on strength and elastic properties of rubber. 1. Theory of degradation and crosslinking processes due to thermal and thermooxidation reactions

SOURCE: Kolloidny*y zhurnal, v. 26, no. 6, 1964, 697-704

TOPIC TAGS: vulcanization, elastic property, thermal reaction, thermooxidation reaction, breakdown rate, degradation, crosslinking

ABSTRACT: A method of evaluating the principal structural parameters of the vulcanization network, i.e., the number of active chains ($M'_c{}^{-1}$), the total number of chains (M_c^{-1}), and the molecular weight for a given moment (M_c) in thermal and thermooxidation processes has been proposed. The method is based on the statistical theory of degradation and crosslinking processes and the theory of high elastic properties of rubber. Equations permitting the determination of the number of broken-down molecular chains and nodes and the number of new nodes formed by secondary reactions during the thermal and thermooxidation process have been de-

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rived. A theoretical examination of the changes in the vulcanization network structure during stress relaxation leads to the conclusion that the breakdown rate of the nodes and chains in the network and the formation rate of the new nodes can be determined separately from the rate constant of relaxation (K) and the data on structural changes in the network. The author shows that K is the sum of the rate constants of node and chain breakdown and is linearly dependent on M_c. This dependence should also hold for unstressed rubber, in which case the breakdown rate of the nodes can be determined if the mechanism of the secondary processes is known. "The author thanks Professor B. A. Dogadkin, Doctor of Chemistry, and Z. N. Tarasova, Candidate of Chemical Sciences, for their valuable comments on the manuscript." Orig. art. has: 23 formulas and 3 figures.

ASSOCIATION: none

SUBMITTED: 00 ENCL: 00 SUB CODE: MT

NO REF SOV: 004 OTHER: 007

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

L 42132-65 EWT(m)/EPF(c)/EPR/EWP(j) Pc-4/Pr-4/Ps-4 WW/RM S/0069/65/027/002/0224/0231

ACCESSION NR: AP5006902

37
37
B

AUTHORS: Lykin, A. S.; Tarasova, Z. N.; Dogadkin, B. A.

TITLE: Effect of vulcanization network structures on the strength and elastic properties of rubber. 2. Structural changes in the network during thermal and thermooxidation activity

SOURCE: Kolloidnyy zhurnal, v. 27, no. 2, 1965, 224-231

TOPIC TAGS: degradation reaction, crosslinked polymer, vulcanization, elastic property, thermooxidation, thermal effect

ABSTRACT: The authors' purpose was to investigate experimentally the changes in structures of the vulcanization network in their dependence on the principal initial parameters, the chemical composition, and the conditions of degradation. Studies were made chiefly on pure cured rubber from natural rubber, vulcanized by different agents and methods. The structural changes in the vulcanization network of different types of rubber containing various rubber hydrocarbons, when subjected to thermooxidation, when swollen in solvent, under conditions of thermal and thermo-oxidative stress relaxations, are due to breakdown of chains and nodes and to the formation of new, secondary nodes. The degradation rate of molecular chains is

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ACCESSION NR: AP5008902

directly proportional to the distance between nodes. The rate of nodal degradation is independent of the initial concentration. The formation of secondary nodes in natural rubber vulcanizates is due chiefly to the reaction of polymer radicals from degradation of the molecular chains. Two new nodes appear as the result of the breakdown of one molecular chain. The degradation rate of the nodes and chains of vulcanizates from carboxyl-bearing rubber during thermal relaxation of stress depends essentially on the content of methacrylic acid. This is due to the presence of blocks of this constituent in the copolymer chains. Orig. art. has: 3 figures and 4 tables.

ASSOCIATION: Nauchno-issledovatel'skiy institut shinnoy promyshlennosti, Moscow (Scientific Research Institute of the Tire Industry)

SUBMITTED: 28Aug64 ENCL: 00 SUB CODE: MT

NO REF SOV: 002 OTHER: 001

Card 2/2

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

L 28457-66 EWT(m)/EWP(j)/T IJP(c) RM

ACC NR: AP6017856 (A) SOURCE CODE: UR/0069/66/028/003/0353/0361

AUTHOR: Dogadkin, B. A.; Tarasova, Z. N.; Lykin, A. S.; Kuanyshev, K. G.

ORG: Scientific Research Institute of the Tire Industry (Nauchno-issledovatel'skiy institut shinnoy promyshlennosti); Moscow Institute of Fine Chemical Technology im. M. V. Lomonosov (Moskovskiy institut tonkoy khimicheskoy tekhnologii im. M. V. Lomonosova)

TITLE: Effect of vulcanization crosslinks and network parameters on the strength of vulcanizates

SOURCE: Kolloidnyy zhurnal, v. 28, no. 3, 1966, 353-361

TOPIC TAGS: vulcanizate, crosslink, network parameter, tensile strength

ABSTRACT: A study has been made of the effect of the cross-link type and network parameters on the tensile strength of unfilled vulcanizates of natural, cis-polyisoprene (SKI), cis-polybutadiene (SKD), butadiene-styrene (BSK), and carboxyl-containing (SKS-30-1) rubbers. Various vulcanizing agents were used to obtain vulcanizates with different cross links, and different network parameters, viz., total number of chains ($1/M_c$) and number of active chains ($1/M'_c$) per cm^3 of the vulcanizate; and value of instantaneous molecular weight M_{n_τ} (molecular

Card 1/2 UDC: 541.68

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

L 28457-66

ACC NR: AP6017856

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weight at a given stage of degradation or cross linking). It was shown that: 1) at up to 120C, for a deformation rate of 500 mm/sec, for a given $1/M_c$ and a constant M_{n_τ}, tensile strength (P) increases in the following order: Ap 355 (this order can be reversed at higher temperatures and lower deformation rates); 2) with an increase in $1/M_c$ the maximum tensile strength increases in the same order as in 1); 3) tensile strength is a linear function of the content (w_α) is the portion of the network determined from formula $W_\alpha = 1 - M_c/M_{n_0}$, where M_{n_0} is the initial molecular weight; 4) vulcanizates containing an optimum ratio of strong to weak, mobile, and readily rearranging crosslinks exhibit high tensile strength; the mobile links dissipate local overstresses and facilitate orientation of the backbones, while the strong crosslinks prevent disintegration of the vulcanizates. Orig. art. has: 9 fig. and 1 table. [BO]

SUB CODE: 07, 11/ SUBM DATE: 29Dec65/ ORIG REF: 010/ OTH REF: 006
ATD PRESS: 5106

Card 2/2 2C

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKO, Jonasz

Effect of chronic chemical poisoning and of prolonged ionizing irradiation on the activity of alkaline phosphatase of human granulocytes. Pol. tyg. lek. 19 no.27:1018-1020 6 Je'64

1. Z III Kliniki Chorob Wewnetrznych Akademii Medycznej w Krakowie; kierownik: prof. dr. med. Julian Aleksandrowicz.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKO, Yu.M.; ANTONOV, G.S.

Short-term tempering of steel. Sbor. nauch. trud. Fiz.-tekh. inst. AN BSSR no.7:161-167 '61. (MIRA 15:7)
(Steel--Heat treatment)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A. G.

USSR (600)

Frozen Ground

Permafrost in the Ufa river valley , Priroda, 41, no. 1., 1952

9. Monthly List of Russian Accessions, Library of Congress, MAY 1953. Unclassified.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.

Fissures of shearing resistance. Biul.MOIP. Otd.geol. 28 no.4:53-70 '53.
(MLRA 6:9)
(Earth movements)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G., inzhener.

Problem of determining the natural properties and conditions of soil strata. Gidr.stroi. 23 no.5:34-35 '54. (MLRA 7:8)
(Soil mechanics)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.; SOKOLOV, D.S.

Development of karst in the southwestern part of the Ufa Plateau.
Biul.MOIP. otd.geol. 29 no.1:35-47 Ja-F '54. (MLRA 7:4)
(Ufa Plateau--Karst) (Karst-Ufa Plateau)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.

SEMENOV, M.P., sotrudnik; ORDOVSKAYA, A.Ye., sotrudnik; LYKOSHIN, A.G., sotrudnik; MOLOKOV, L.A., sotrudnik; KHRAMOGINA, T.S., sotrudnik; GOLUBENKOVA, L.A., redaktor izdatel'stva; GUSEVA, S.S., tekhnicheskiy redaktor

[Papers from the hydrogeological engineering laboratory] Trudy laboratorii inzhenernoi gidrogeologii. Moskva, Gos.izd-vo lit-ry po stroit. i arkhit., 1957. 230 p. (MLRA 10:7)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii. 2. Vsesoyuznyy nauchno-issledovatel'skiy institut Vodgeo (for Semenov, Ordovskaya). 3. Moskovskoye otdeleniye Gidroenergoproyekta (for Lykoshin, Molokov, Khramogina) (Hydraulic engineering) (Engineering geology)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

SEMENOV, M.P., doktor geologo-mineralogicheskikh nauk, prof., red.; PRIKLONSKIY, V.A., doktor geol.-mineral. nauk, prof., red.; MASLOV, N.N., doktor tekhn.nauk, red.; POKROVSKIY, G.I., red.; MOROZOV, S.S., doktor geol.-mineral.nauk, red.; RUBINSHTEYN, A.L., red.; SOKOLOV, D.S., kand.geol.-mineral. nauk, red.; LYKOSHIN, A.G., red.; YANSHINA, M.S., red.; ORADOVSKAYA, A.Ye., nauchnyy sotrudnik, red.; SAFONOV, P.V., red.izd-va; BUSEVA, S.S., tekhn.red.

[Dissolving and leaching rock] Rastvorenie i vyshchelachivanie gornykh porod. Moskva, Gos. izd-vo lit-ry po stroit. i arkhit., 1957. 264 p. (MIRA 11:2)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii. 2. Zaveduyushchiy laboratoriyey inzhenernoy gidrogeologii Vsesoyuznogo nauchno-issledovatel'skogo instituta vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii.(for Semenov). 3. Laboratoriya gidro-geologicheskikh problem imeni F.P.Savarenskogo (for Priklonskiy). 4. Leningradskiy inzhenerno-stroitel'nyy institut (for Maslov). 5. Moskovskiy gosudarstvennyy universitet imeni Lomonosova (for Morozov). 6. Moskovskiy geologorazvedochnyy institut imeni S. Ordzhonikidze (for Sokolov). 7. Vsesoyuznyy nauchno-issledovatel'skiy institut vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrologii (for Oradovskaya)
(Leaching)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A. G.

98-7-5/20

AUTHOR: Lykoshin, A.G., Engineer

TITLE: Tests for Determining the Water Permeability of Dam Foundations Based on Pumping Operations from the Excavation (Opyt otsenki vodopronitsayemosti osnovaniya plotiny po dannym otkachki iz stroitel'nogo kotlovana)

PERIODICAL: Gidrotekhnicheskoye Stroitel'stvo, 1957, # 7, p 22-25 (USSR)

ABSTRACT: The construction site of the Pavlov Hydroelectric Power Plant (Pavlovskiy Ges) is located on the Ufa river, the valley of which cuts through limestone formations of the Permian epoch. The limestone strata is over 200 m thick, the layers are almost horizontal, with large crevices, filled with sand-clay-gravel deposits, lowering its permeability. The river bed is covered with alluvial deposits, up to 5 m thick, composed of eroded limestone and river sediments. The waterbearing strata, located within the limestone, drains into the river. Conducted tests yielded 6 different zones of permeability. Occasionally, bore holes had exceptionally high water permeability. The construction of the earth dam included the building of a non-porous projection extending through the alluvial strata and the disintegrated top limestone layer. On the left bank of the river pumping operations were carried out for 2 years at an ex-

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Tests for Determining the Water Permeability of Dam Foundations Based on Pumping Operations from the Excavation

cavation alongside a concrete structure. It was noted that the water level of 2 wells on the right bank was continuously lower than the level of the river. Special hydro-geological tests were conducted to establish the permeability of silt deposits on river beds. By finding the difference between the water level of the river and the water table of the limestone, the filtering gradient from the river bed to the excavation could be established. The prepared chart of water contour lines shows the existing decrease of the water table around the excavation, whereby this low level extended under the bed of the river and partly under the right bank. In order to establish the permeability rate of the silt layer, tests were conducted by the EGDA (ЭГДА - elektrodinomicheskaya analogiya - electrical analogy of a hydrodynamic process). The tests showed that the permeability of the silt layers was 500 times lower than that of the limestone formation. Based on an average limestone filter effect of 20 m/24 hrs, the silt layer showed a filtering coefficient of 0.04 m/24 hrs. Deposits of silt on river bottoms were observed in mountain streams as well as in lowland

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

98-7-5/20

Tests for Determining the Water Permeability of Dam Foundations Based on Pumping Operations from the Excavation

rivers. The most effective way to learn the state of silt deposition on rocks is to establish the permeability. As soon as the lowering of the water table by means of powerful pumps and the creation of sub-surface water movement is accomplished, piezometric methods can be applied.
There are 1 table, 2 figures and 1 Russian reference.

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APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.; SOKOLOV, D.S.

Red spring. Priroda 46 no.8:86-88 Ag '57. (MLRA 10:9)

1. Moskovskoye otdeleniye Instituta Gidroenergoproyekt (for Lykoshin). 2. Moskovskiy Geologo-razvedochnyy institut im. S. Ordzhonikidze (for Sokolov).
(UFA--Springs)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

Lykoshin, A. G.

98-58-6-3/21

AUTHORS: Lykoshin, A.G., and Kuznetsov, I.I., Engineers

TITLE: Experience in the Utilization of Shaft Holes in Construction Drainage (Opyt ispol'zovaniya skvazhin-shakht dlya stroitel'-nogo vodootliva)

PERIODICAL: Gidrotekhnicheskoye Stroitel'stvo, 1958, Nr 6, pp 12-14 (USSR)

ABSTRACT: During the construction of the Pavlovskaya GES (Pavlovsk Hydro-Electric Power Plant) on the Ufa river, the authors devised a method of draining the water from the foundation pit by constructing a series of shaft holes, from which the infiltrating water was systematically pumped out. The boring of these 141 meters of shafts cost 1,600 rubels a meter, all expenses included. According to the initial project, 2 sumps were to be bored in the foundation pit, at the cost of 930,000 rubels. By replacing these pits by shaft-holes, important economies were achieved and the whole operation took much less time.
There is 1 figure and 1 Soviet reference.

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Card 1/1 1. Electric power production 2. Drainage 3. Power plants-Construction

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

BELYY, L.D., doktor geologo-mineral.nauk; LYKOSHIN, A.G., inzh.-geolog; MOLOKOV, L.A., inzh.-geolog; KONYAROVA, L.P., inzh.-geolog; NEYSHTADT, L.I., kand.geologo-mineral.nauk; VASIL'YEVA, L.R., inzh.-geolog; ZENKOV, N.A., inzh.-geolog; VOZNESENSKIY, A.N., prof., obshchiy red.; ASANOV, A.M., tekhn.red.

[Geology and dams] Geologiia i plotiny. Pod obshchei red. A.N.Voznesenskogo. Moskva, Gos.energ.izd-vo. (Materialy po proektirovaniiu gidroenergeticheskikh uzlov. Ser.2. Izyskaniia). Vol.1. 1959. 182 p. (MIRA 13:2)

1. Moscow. Vsesoyuznyy gosudarstvennyy proyektnyy institut "Gidroenergoproyekt." 2. Glavnyy inzhener otdela izyskaniy instituta "Gidroenergoproyekt" (for Belyy).
(Dams) (Engineering geology)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.

Methods for studying karst from the point of view of engineering geology in connection with hydraulic construction. Izv. vys. ucheb. zav.; geol. i razv. 2 no.1:91-103 Ja '59. (MIRA 12:10)

1.Institut "Gidroenergoproyekt".
(Karst)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

ZOLOTAREV, G.S., red.; SOKOLOV, D.S., red.; CHAPOVSKIY, Ye.G., red.; BINDEMAN, N.N., red.; LYKOSHIN, A.G., red.; TITOV, N.A., red.; GARMONOV, I.V., retsenzent; PRIKLONSKIY, V.A., retsenzent; POPOV, I.V., retsenzent; RODIONOV, N.V., retsenzent; KHAKIMOV, V.Z., red.; YERMAKOV, M.S., tekhn.red.

[Methods and results in the study of hydrogeological and engineering geological conditions of large reservoirs] Opyt i metodika izucheniia gidrogeologicheskikh i inzhenerno-geologicheskikh uslovii krupnykh vodokhranilishch. Pod red. G.S. Zolotareva, D.S.Sokolova i E.G.Chapovskogo. Moskva, Izd-vo Mosk. univ. Pt.1. 1959. 175 p. diagrs, maps.

(MIRA 14:4)

(Volga Valley--Reservoirs) (Engineering geology)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

SEMENOV, M.P.; LYKOSHIN, A.G.

Colmation of rocks and its importance for hydraulic engineering. Trudy Lab. iuzh. gidrogeol. VODGEO no. 3:37-57 '60. (MIRA 14:4)
(Hydraulic engineering)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

BELYY, L.D., doktor geol.-miner.nauk; VERIGIN, N.N., doktor tekhn. nauk, prof., ABRAMOV, S.K., kand.tekhn.nauk; LYKOSHIN, A.G., inzh.-gidrogeolog

Valuable generalization of experience ("Trudy" of the State Institute for the Design and Planning of Hydraulic Structures. No.3. Reviewed by L.D. Belyi and others). Gidr. stroi. 30 no.6:63-64 Je '60. (MIRA 13:7)
(Hydraulic engineering--Research)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A. G., inzh.

Ways of lowering costs, reducing the time, and increasing the quality of the study of construction sites from the point of view of engineering geology. Gidr. stroi. 30 no.11:47-49 N '60. (MIRA 13:10)

(Geological surveys) (Electric power stations)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

ZOLOTAREV, G.S., red.; SOKOLOV, D.S., red.; CHAPOVSKIY, Ye.G., red.; GARMANOV, I.V., retsenzent; PRIKLONSKIY, V.A., retsenzent [deceased]; POPOV, I.V., retsenzent; RODIONOV, N.V., retsenzent; TITOV, N.A., nauchnyy red.; FILIPPOVA, B.S., red.; BINDEMAN, N.N., red.; LYKOSHIN, A.G., red.; YERMAKOV, M.S., tekhn. red.

[Results achieved and methods used in studying hydrogeological and engineering geological conditions of large reservoirs] Opyt i metodika izucheniia gidrogeologicheskikh i inzhenerno-geologicheskikh uslovii krupnykh vodokhranilishch. Pod red. G.S.Zolotareva, D.S. Sokolova i E.G.Chapovskogo. Moskva, Izd-vo Mosk. univ. Pts.2 and 3. 1961. 360 p. diagrs, maps. (MIRA 14:8)
(Reservoirs) (Engineering geology)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.

Some hydrodynamic regularities in the development of karst in platoform areas. Zemlevedenie 5:173-189 '60. (MIRA 15:8)
(Karst) (Water, Underground)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

KOTUL'SKIY, V.V., inzh.; IL'INA, O.V., inzh.; KIRICHENKO, N.I., kand. geol.-miner. nauk; MARTYNOV, V.S., inzh.; LYKOSHIN, A.G., kand. geol.-miner. nauk, nauchn. red.; GLOTOVA, L.V., red.; KASIMOV, D.Ya., tekhn. red.

[Seepage-preventing screens for dams; investigations, design, and construction] Protivofil'tratsionnye zavesy plotin; iz opyta izyskanii, proektirovaniia i stroitel'stva. Moskva, Gosstroiizdat, 1963. 194 p. (MIRA 17:1)

1. Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut vodosnabzheniya kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii.

(Dams)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A. G.

S/011/63/000/001/001/002
A006/A101

AUTHORS: Gvozdetskiy, N. A., Chikishev, A. G.

TITLE: The Conference on applied karstology

PERIODICAL: Izvestiya Akademii nauk SSSR, Seriya geologicheskaya, no. 1, 1963, 124 - 126

TEXT: The Conference was held in Moscow on April 23 - 25, 1962, and was attended by 35 representatives from 16 scientifical and industrial organizations. The Conference was opened by N. A. Gvozdetskiy who reported on the activities of the Geographical section of the Moscow Society of Natural scientists. The following reports were delivered: A. G. Lykoshin on the investigation of karsts for hydro-engineering construction by geological engineers; V. S. Polevoy on the use of geophysical methods to study karsts in areas of hydrological engineering structures; I. A. Savarenskiy on problems considering karsts in industrial and urban construction in the Dzerzhinsk region; N. A. Gvozdetskiy on "Karst in the region of Caucasian Mineral Water Sources"; I. I. Ginzburg on mineral resources connected with karst processes; G. I. Bushinskiy on bauxite and phosphorite karst deposits; Ye. T. Bobrov on "Karst bauxites of the Yenisey ridge and the adjacent region of

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The Conference on applied karstology

the Siberian platform"; N. A. Lisitsyna on "Karst bauxites in the Kazakh foldings and the Turgay depression"; B. N. Ivanov and V. N. Dublyanskiy on "The importance of the Crimea karst in national economy"; A. G. Chikishev on "The importance of the Central Ural karst in national economy"; I. K. Kudryashov on the influence of karst on agriculture in some Bashkirian regions; The reports delivered were discussed by D. S. Sokolova, V. A. Varsanof'yeva, N. A. Krasil'nikova, S. A. Sladkopevtseva, V. S. Polevoy and others. The Conference approved the methods of karst investigation, including geophysical means, electrical seismic and ultrasonic prospecting. It was decided to investigate in detail the development and expansions of karst; to study the origination of karst bauxites, to control the purity of mineral water sources and to continue research in the agricultural regions of Bashkiria.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

KOTUL'SKIY, V.V., inzh.; IL'INA, O.V., inzh.; KIRICHENKO, N.I., kand. geol.-miner. nauk; MARTYNOV, V.S., inzh.; LYKOSHIN,A.G., kand.geol.-min.nauk,nauchn.red.; GLOTOVA,L.V.,red.; KASIMOV,D.Ya., tekhn.red.

[Seepage-control curtains of dams; investigation, planning, and building] Protivofil'tratsionnye zavesy plotin; iz opyta izyskanii, proektirovaniia i stroitel'stva. Moskva, Gosstroiizdat, 1963. 194 p. (MIRA 17:2)

1l.Moscow. Vsesoyuznyy nauchno-issledovatel'skiy institut vodosnabzheniya, kanalizatsii, gidrotekhnicheskikh sooruzheniy i inzhenernoy gidrogeologii.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

KONYAROVA, L.P.; NEYSHTADT, L.I.; LYKOSHIN, A.G.; KARPYSHEV, Ye.S.; BOROVOY, A.A., red.; BELYY, L.D., doktor geol.-miner. nau, red.; BUL'DYAYEV, N.A., tekhn. red.

[Geology and dams] Geologiia i plotiny. Pod obshchei red. A.A.Borovogo. Moskva, Gosenergoizdat, Vol.3. 1963. 175 p. (MIRA 17:3)

1. Moscow. Vsesoyuznyy proyektno-izyskatel'nyy i nauchno-issledovatel'skiy institut "Gidroproyekt" im. S.IA.Zhuka. 2. Vsesoyuznyy proyektno-izyskatel'nyy i nauchno-issledovatel'skiy institut, Moscow (for Konyarova, Neyshtadt, Lykoshin, Karpyshev).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.

Basic problems in the study of karst in connection with hydraulic engineering construction. Biul. MOIP Otd. geol. 37 no.6:141 N-D '62. (MIRA 16:8)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, A.G.

Investigation of karst from the viewpoint of engineering geology for the purposes of hydraulic construction. Trudy MOIP 12:151-165 '64.
(MIRA 18:1)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOSHIN, B.A.; PISAREV, N.V., red.

[Handbook on local defense against air attack] Posobie po mestnoi PVO. 2. izd. Moskva, Vodtransizdat, 1954. 141 p. (MIRA 16:7)

(Air defenses)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A., akademik, zasluzhennyy deyatel' nauki i tekhniki RSFSR.

Problem requiring an immediate solution. NTO 2 no.8:5-6 Ag '60.

1. AN BSSR. Predsedatel' komiteta po sushke pri Vsesoyuznom sovete nauchno-tekhnicheskikh obshchestv.
(Drying)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A.

Utilization of synthetic urea (carbamide) in fattening cattle with beet pulp. Mias. ind. SSSR 32 no.4:31-32 '61. (MIRA 14:9)

1. Krasnodarskaya kontora Zagotskotootkorma.
(Cattle--Feeding)
(Urea)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOW, A.W. [Lykov, A.B.]; FENYES, I.; ENDRENYI, S.

The knowledge of heat and mass transfer as foundation for the theory of drying. Acta techn Hung 11 no.1/2:201-224 '62.

1. Mitglied der Akademie der Wissenschaften der Belorussischen Socialist.Sowjetrepublik (for Lykov).

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

SHUGAL, Ye.G.; RYABOY, O.M.; BOCHAROVA, T.V.; KISLYAK, L.M.; KOBEL'KOVA, A.M.; MAKOV, A.D.; MANYAKHINA, O.V.; SHLENOVA, T.G.; YAGUPOVA, Ye.I.; IVANOV, N.A.; RYBKIN, I.P.; KHOKHLOVA, P.Ye.; KHRUNTYAYEVA, A.S.; FROLOVA, M.I.; RAKOV, F.M., red.; MARCHENKO, V.A., red.; KOLPAKOV, B.T., red.; DEMINA, V.N., red.; MELENT'YEV, A.M., tekhn. red.

[Soviet commerce of the R.S.F.S.R.; a statistical manual] Sovetskaia torgovlia v RSFSR; statisticheskii sbornik. Moskva, Gos. stat. izd-vo, 1956. 342 p. (MIRA 11:10)

1. Russia (1917- R.S.F.S.R.) TSentral'noye statisticheskoye upravleniye.
(Commercial statistics)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

MASLOV, D.P., kand. tekhn. nauk, dots.; GURIN, F.V., kand. tekhn. nauk, dots.; KUZNETSOV, A.M., inzh.; VASIL'YEV, A.M., inzh.; LYKOV, A.G., inzh., retsenzent; PINSKER, A.L., inzh., red.; LESNICHENKO, I.I., red.; MODEL', B.I., tekhn. red.

[Technology in the motor-vehicle and tractor industry]Tekhnologiia avtotraktorostroeniia.[By]D.P.Maslov i dr. Moskva, Mashgiz, 1962. 432 p. (MIRA 16:2)
(Motor vehicles--Design and construction)
(Tractors--Design and construction)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A.I. [Lykov, O.I.]; MARCHENKO, Ye.Ya.

Skarns of the southwestern edge of the Donets Basin. Dop.AN URSR no.9:1286-1289 '60. (MIRA 13:10)

1. Institut mineral'nykh resursov AN USSR. Predstavleno akademikom AN USSR V.G.Bondarchukom.
(Donets Basin--Skarns)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A.I.

Use material incentives in the development and use of new equipment.
Vest. sviazi 24 no.9:15-16 S '64. (MIRA 17:11)

1. Starshiy inzh. Tekhnicheskogo upravleniya Ministerstva svyazi SSSR.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A. I.

Cand Geol-Min Sci - (diss) "Mineralogy of the ore outcroppings of the southwestern borderland of the Donbass." Simferopol', 1961. 20 pp; (Academy of Sciences Ukrainian SSR, Inst of Mineral Resources); 200 copies; price not given; (KL, 6-61 sup, 203)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

GLADKIY, M.I.[deceased]; SHANIN, G.A.; IODKO, Ye.K.; MANAYENKOV, S.D.; MIKHAYLOV, E.A.; GRIBOVA, Ye.N.; LUGOVSKIY, P.P.; KULESHOV, S.M.; SHATOV, A.I.; SHNYREVA, N.N.; ISHKOVA, V.M.; LYKOV, A.I.; TYULYAYEV, A.N., otv. red.; SIDOROVA, T.S., red.; SHEFER, G.I., tekhn. red.

[Determining the economic efficiency of new machinery in the communication system] Opredelenie ekonomicheskoi effektivnosti novoi tekhniki v khoziaistve sviazi; informatsionnyi sbornik. Moskva, Sviaz'izdat, 1962. 174 p. (MIRA 16:3)
(Communication and traffic--Technological innovations)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

YEGOROV, V.Ye., doktor sel'skokhozyaystvennykh nauk, prof.;
LYKOV, A.M., aspirant

Content and composition of humus in continuously fertilized soils, in crop rotation and monoculture. Izv. TSKHA no.3:66-77 '62. (MIRA 15:9)

(Podzol) (Fertilizers and manures) (Humus)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A.M., aspirant; YEGOROV, V.Ye., prof., nauchnyy rukovoditel'

Characteristics of organic substances in soils determined by Springer's method in a continuous experiment of the Timiriazev Agricultural Academy. Izv. TSKHA no.3:224-227 '63. (MIRA 16:9)
(Humus)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A.M.

Postharvest crops in the German Democratic Republic. Zemledelie 27 no.7:92-94 Jl '65. (MIRA 18:7)

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

YEGOROV, V.Ye.; LYKOV, A.M.

Change of the organic matter in turf-Podzolic soils after 50 years of farming. Pochvovedenie no.10:37-48 O '63. (MIRA 16:12)

1. Moskovskaya ordena Lenina sel'skokhozyaystvennaya akademiya imeni K.A.Timiryazeva.

APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8"

"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A.M., kand. sel'skokhoz. nauk

Role of continuous use of fertilizers, crop rotation, and monocultures in the change of the organic matter in Podzolic soils. Izv. TSKHA no.6:57-63 '63. (MIRA 17:8)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

PYASETSKIY, P.K.; LYKOV, A.N.; KOLODEZH, A.Z.

Direct-current transfer trucks equipped with bracket platforms. Rats. i izobr. predl. v stroi. no.5:48-50 '58. (MIRA 11:6)

1.Nachal'nik proizvodstvenno-tekhnicheskogo otdela Beskudnikovskogo kirpichnogo zavoda No.2, stantsiya Beskudnikovo, Krasnopolynakskiy rayon Moskovskoy oblasti (for Pyasetskiy). 2.Glavnyy mekhanik Beskudnikovskogo kirpichnogo zavoda No.2, stantsiya Beskudnikovo, Krasnopolyanskiy rayon Moskovskoy oblasti (for Lykov). 3. Glavnyy energetik Beskudnikovskogo kirpichnogo zavoda No.2, stantsiya Beskudnikovo, Krasnopolyanskiy rayon Moskovskoy oblasti (for Kolodezh).
(Brickmaking) (Conveying machinery)

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

L 1993-66 EWT(1)/EWT(m)/EPF(c)/EWG(m)/EWP(j)/T/ETC(m) RPL DS/WW/JW/RM

ACCESSION NR: AP5014739 UR/0201/65/000/001/0054/0063

AUTHOR: Lykov, A. V.

TITLE: Thermodynamics and heat exchange of a suspension consisting of gas and solid particles

SOURCE: AN BSSR. Izvestiya. Seriya fiziko-tekhnicheskikh nauk, no. 1, 1965, 54-63

TOPIC TAGS: chemical reaction kinetics, irreversible thermodynamics, thermodynamic analysis, transport theory, fuel mixing

ABSTRACT: The article considers chemical reactions whose rate is determined by the rate of heat supply and the supply of the reacting substance, and also by the rate of removal of the reaction products. The system consists of solid particles moving in a stream of a heated gas mixture. It is assumed that the chemical reaction gives rise also to a friction force which depends on the relative

Card 1/3

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ACCESSION NR: AP5014739

velocity of the particle. A system of differential equations is written for the continuity and conservation of the masses of the individual components, and for the motion of the gas and of the particles, and for the transport of kinetic energy of apparent motion. Using the thermodynamics of irreversible processes, equations are derived for the rate of entropy growth and for the thermodynamic forces. The results show that the friction force of the solid particle affects the thermal conductivity in the boundary layer and the diffusion of the reacting substances, thereby affecting the rate of the chemical reactions. The chemical reactions occurring in nonstationary processes and the differential equations for mass transport are also discussed. The advantage claimed for the approach used in the paper are also discussed. The advantage claimed for the approach used in the paper is that it permits a joint investigation of heat and mass transport, the kinetics of chemical reaction, and the hydrodynamics of the stream. Orig. art. has: 60 formulas.

Card 2/3

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

L 1993-66

ACCESSION NR: AP5014739

ASSOCIATION: NONE

SUBMITTED: 00 ENCL: 00 SUB CODE: ME, TD

NR REF SOV: 001 OTHER: 004

Card 3/3 DP

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

L 3651-66 EWT(1)/EWT(m)/EWP(w)/EPF(c)/ETC/EPF(n)-2/EWG(m) JD/WW/JW/EM

ACCESSION NR: AP5022383 UR/0170/65/009/003/0287/0304 55
536.75+536.24 52
B

AUTHOR: Lykov, A. V. 44,55

TITLE: Application of the thermodynamics of irreversible processes to an investigation of heat and mass transfer

SOURCE: Inzhenerno-fizicheskiy zhurnal, v. 9, no. 3, 1965, 287-304

TOPIC TAGS: heat transfer 21,44,55, mass transfer, irreversible process, chemical kinetics, thermodynamics 18, stress relaxation 46, Boltzmann equation

ABSTRACT: The article is a general theoretical survey of the subject without presentation of experimental data, and is based on the use of the theory of the thermodynamics of irreverisble processes rather than the theory of kinetics or the statistical mechanics of irreversible processes. The basic mathematical derivation is based on Gibbs equation. Maxwell's equations are applied to a consideration of the relaxation of stresses in viscoelastic bodies. The article goes on to treat mass transfer in colloidal capillary porous bodies in which, in addition to Fick's Law diffusion, there is a rather slow movement of moisture due to the

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ACCESSION NR: AP5022383

3

action of capillary forces. It concludes with a consideration of turbulent heat and mass transfer processes and, based on the Boltzmann equation, gives a mathematical solution of the problem for mass transfer in porous bodies. Orig. art. has: 89 formulas.

ASSOCIATION: Institut teplo- i massoobmena AN BSSR, g. Minsk (Institute of Heat and Mass Transfer of the AN BSSR, Minsk)

44,55

SUBMITTED: 00 ENCL: 00 SUB CODE: TD

NR REF SOV: 005 OTHER: 012

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Card 2/2

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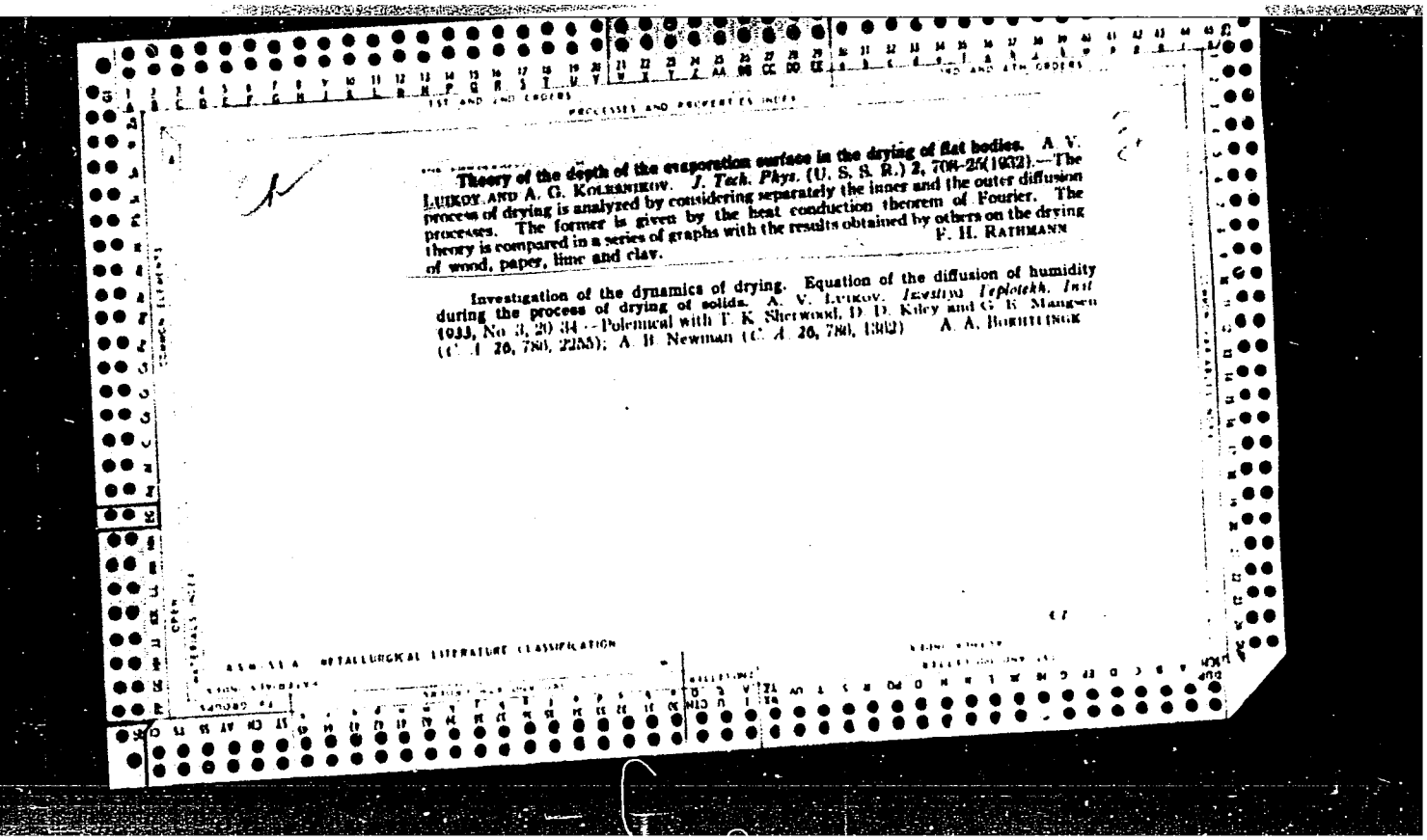

Theory of the depth of the evaporation surface in the drying of flat bodies. A. V. LUIKOV AND A. G. KOLESNIKOV. *J. Tech. Phys.* (U. S. S. R.) 2, 708-25(1932).—The process of drying is analyzed by considering separately the inner and the outer diffusion processes. The former is given by the heat conduction theorem of Fourier. The theory is compared in a series of graphs with the results obtained by others on the drying of wood, paper, lime and clay. F. H. RATHMANN

Investigation of the dynamics of drying. Equation of the diffusion of humidity during the process of drying of solids. A. V. LUIKOV. *Izvestiya Teploteknk. Inst.* 1933, No. 3, 20) 34 pp.—Polemical with T. K. Sherwood, D. D. Kiley and G. B. Mangers (*C. A.* 26, 780, 2255); A. B. Newman (*C. A.* 26, 780, 1302) A. A. BOBETINOK

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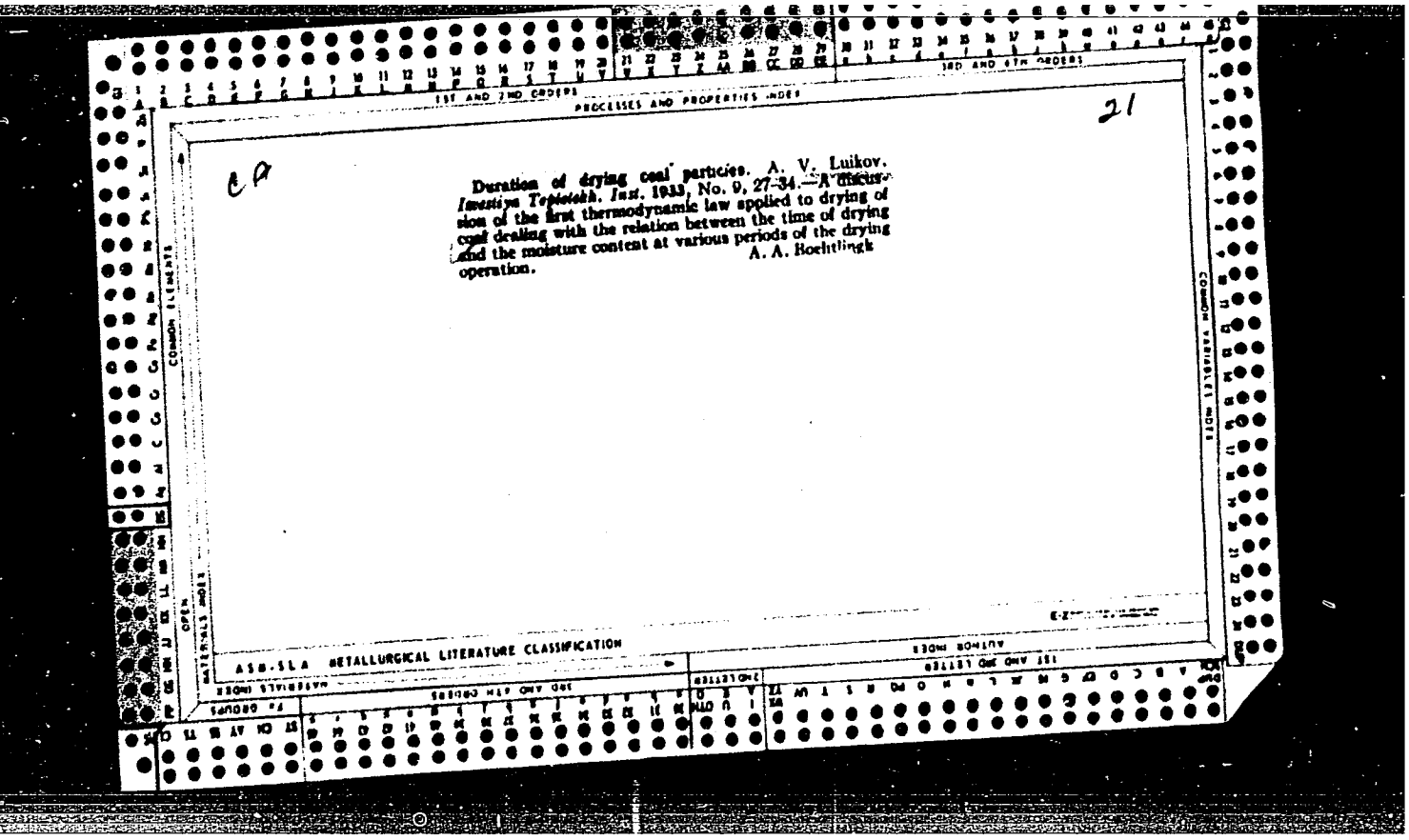

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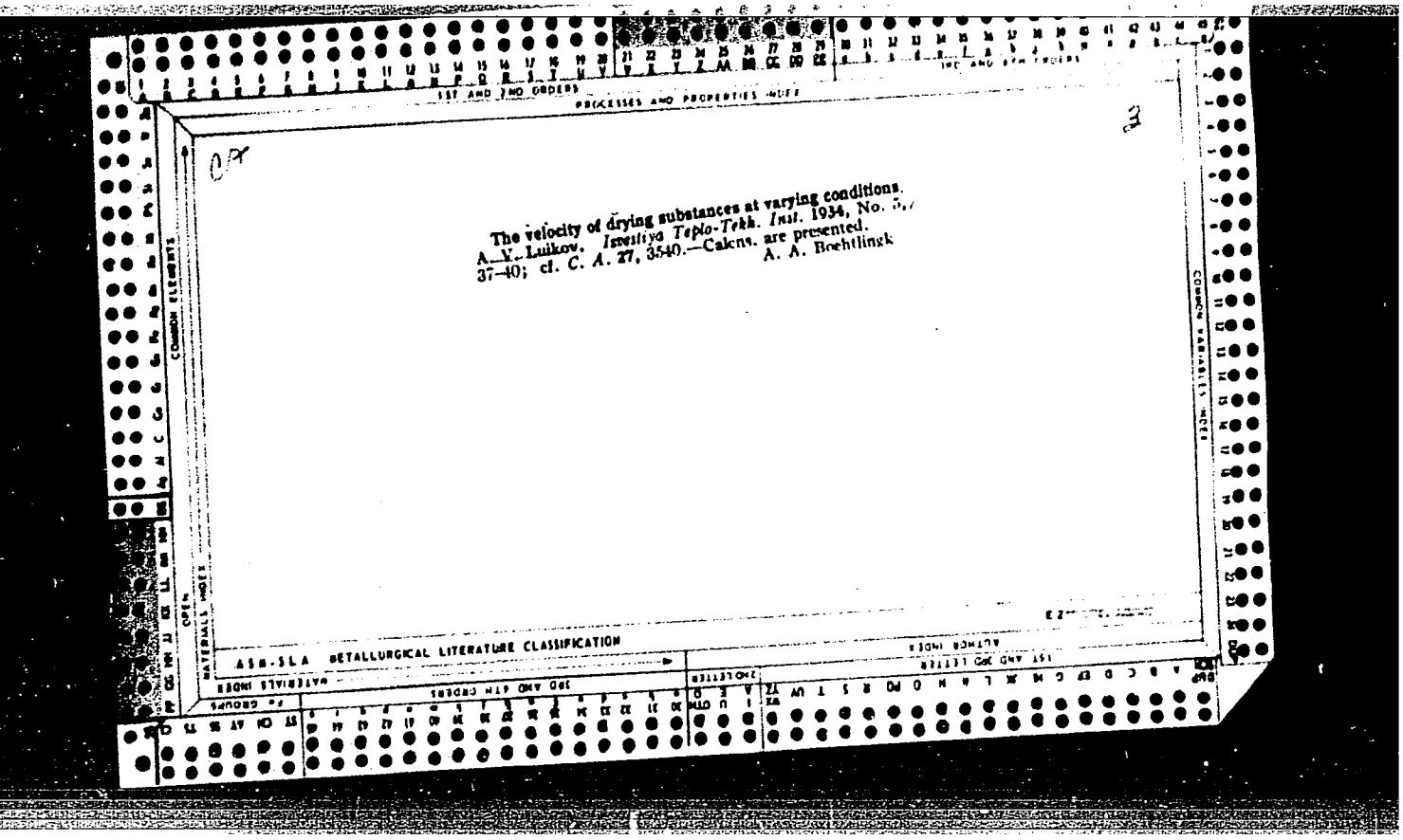

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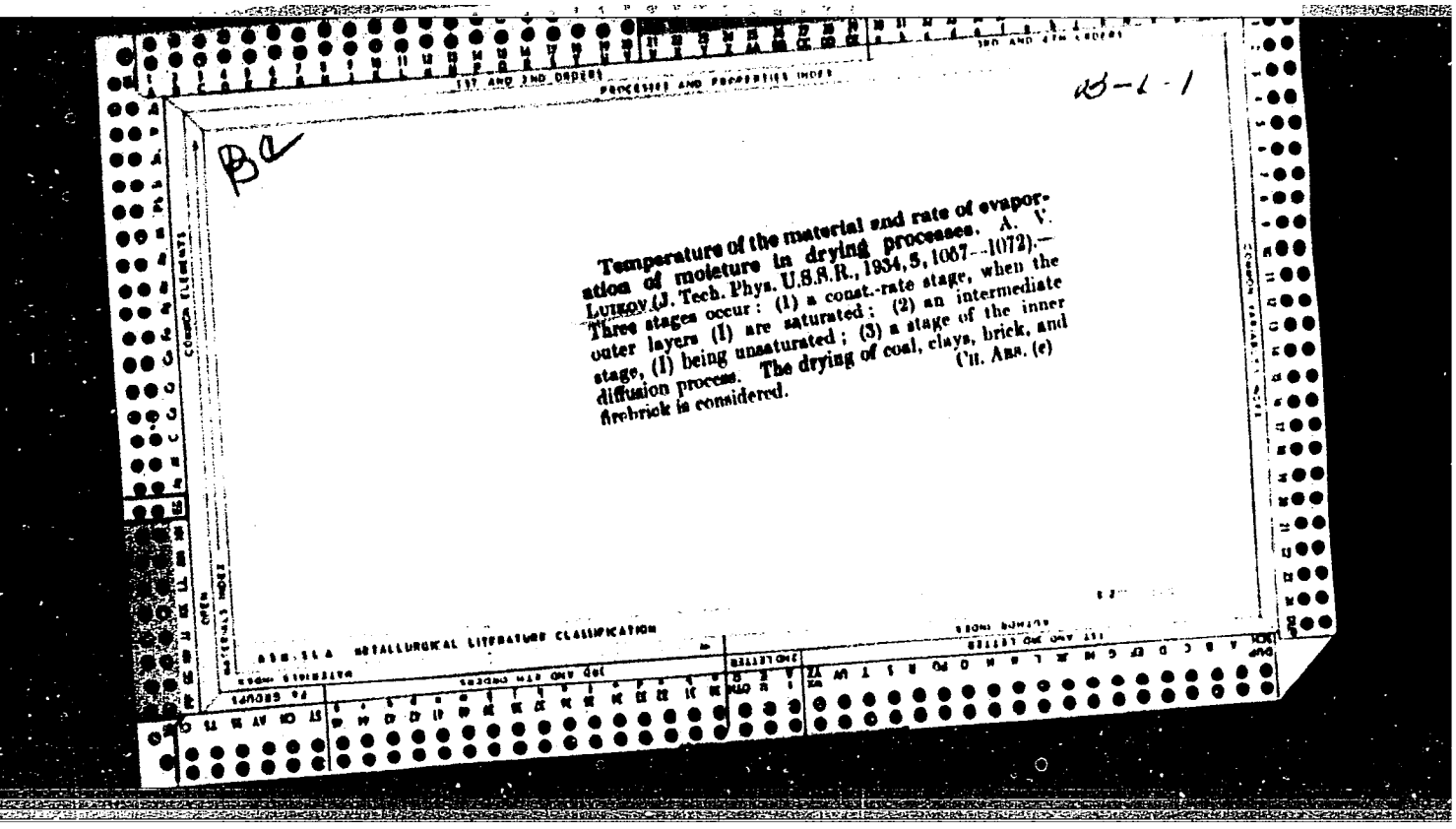

Temperature of the material and rate of evaporation of moisture in drying processes. A. V. Lutkov (J. Tech. Phys. U.S.S.R., 1934, 5, 1067—1072).—Three stages occur: (1) a const.-rate stage, when the outer layers (1) are saturated; (2) an intermediate stage, (1) being unsaturated; (3) a stage of the inner diffusion process. The drying of coal, clays, brick, and firebrick is considered. (Ti. Abs. (e)

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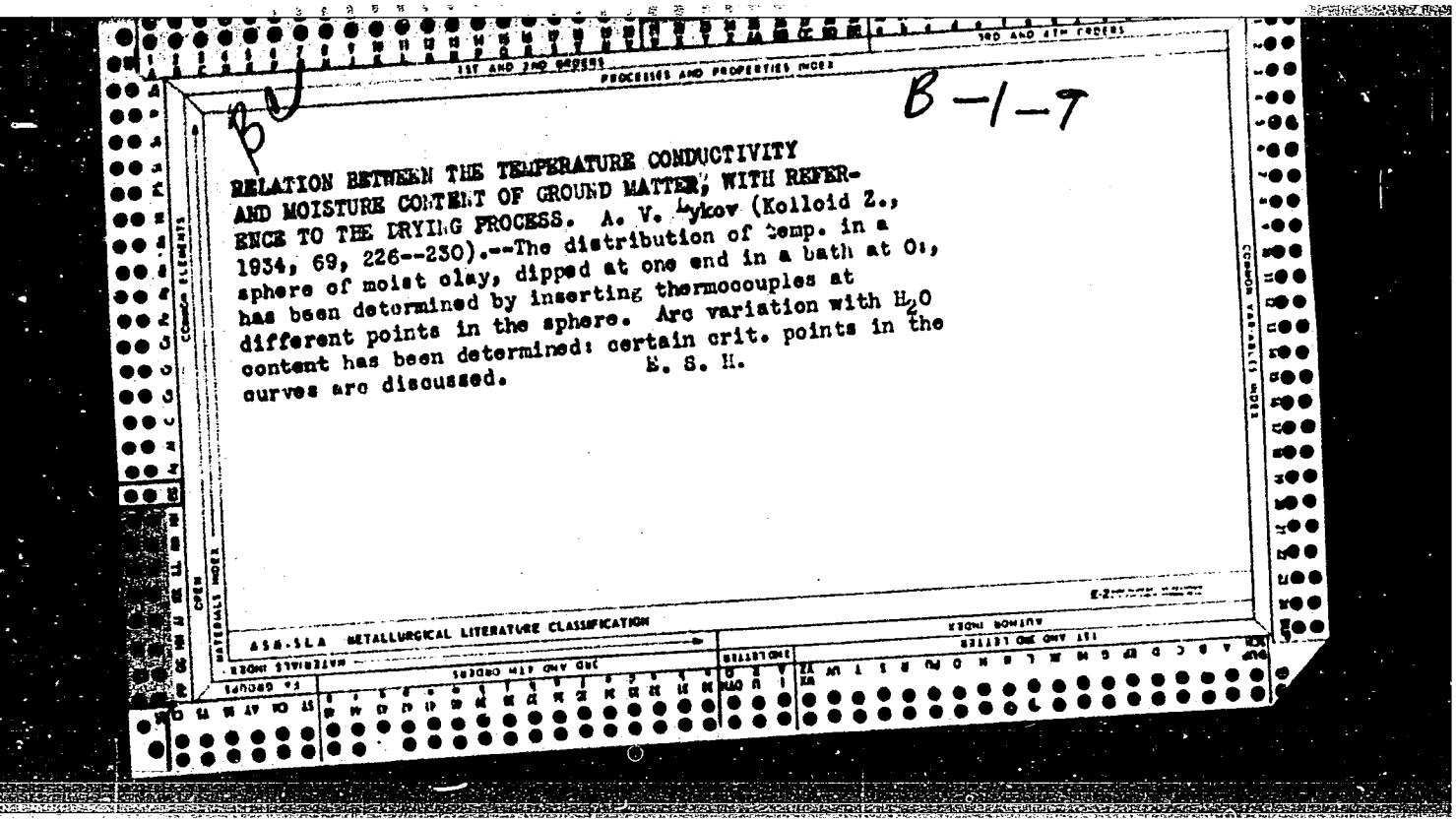

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RELATION BETWEEN THE TEMPERATURE CONDUCTIVITY AND MOISTURE CONTENT OF GROUND MATTER, WITH REFERENCE TO THE DRYING PROCESS. A. V. Lykov (Kolloid Z., 1934, 69, 226--230).--The distribution of temp. in a sphere of moist clay, dipped at one end in a bath at 0°, has been determined by inserting thermocouples at different points in the sphere. Arc variation with H_2O content has been determined: certain crit. points in the curves are discussed. E. S. H.

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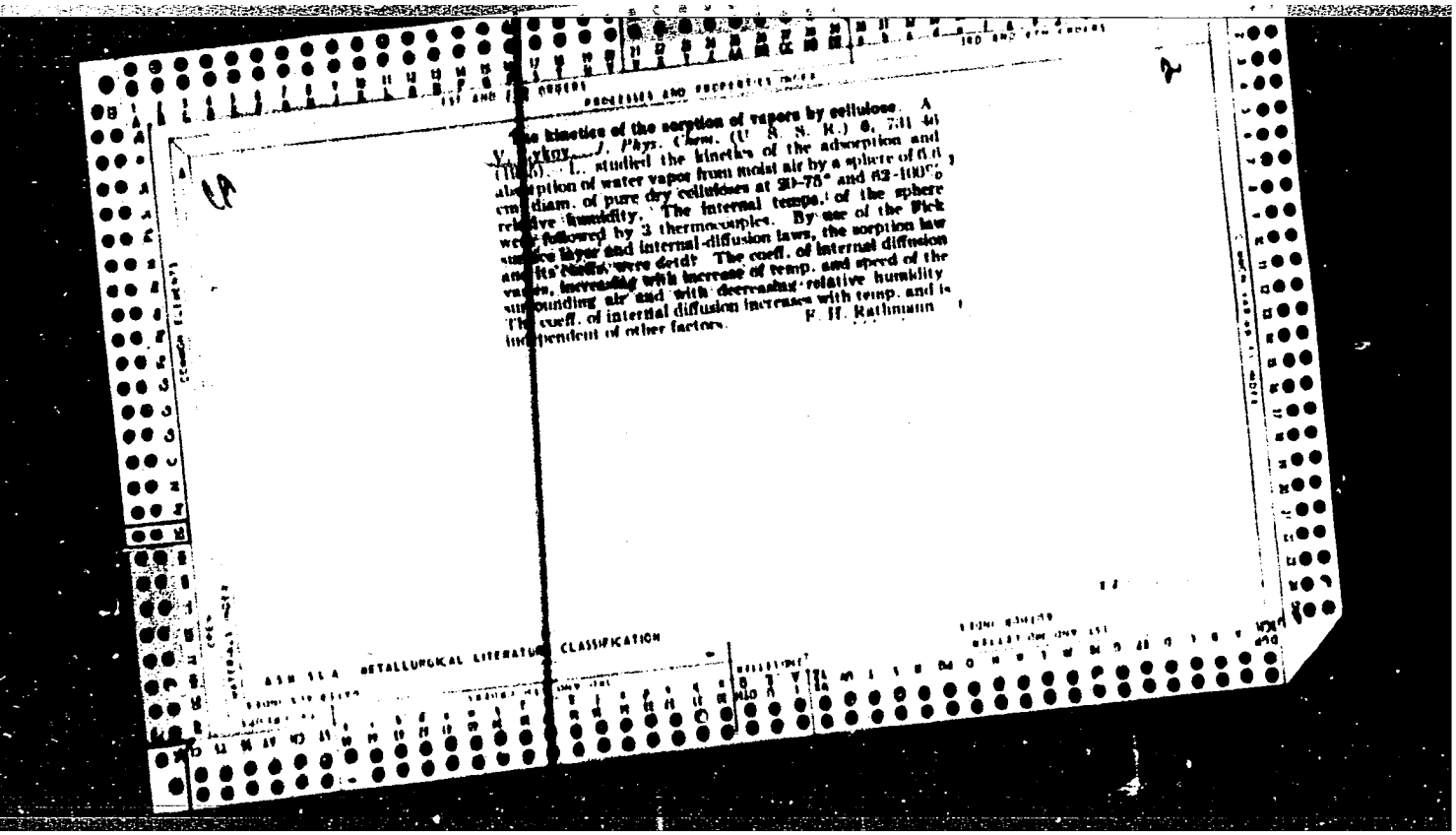

he kinetics of the sorption of vapors by cellulose. A
Yu. Gykov, J. Phys. Chem. (U. S. S. R.) 6, 711 40
(1935). L. studied the kinetics of the adsorption and
ab ption of water vapor from moist air by a sphere of fi
cm diam. of pure dry celluloses at 20-75° and 62-100°
relative humidity. The internal temps. of the sphere
we followed by 3 thermocouples. By use of the Fick
su ve layer and internal-diffusion laws, the sorption law
an its limits were detd. The coeff. of internal diffusion
va e, increasing with increase of temp. and speed of the
su ounding air and with decreasing relative humidity
Th coeff. of internal diffusion increases with temp. and is
in dependent of other factors. P. H. Rathmann

ASM SLA METALLURGICAL LITERATURE CLASSIFICATION

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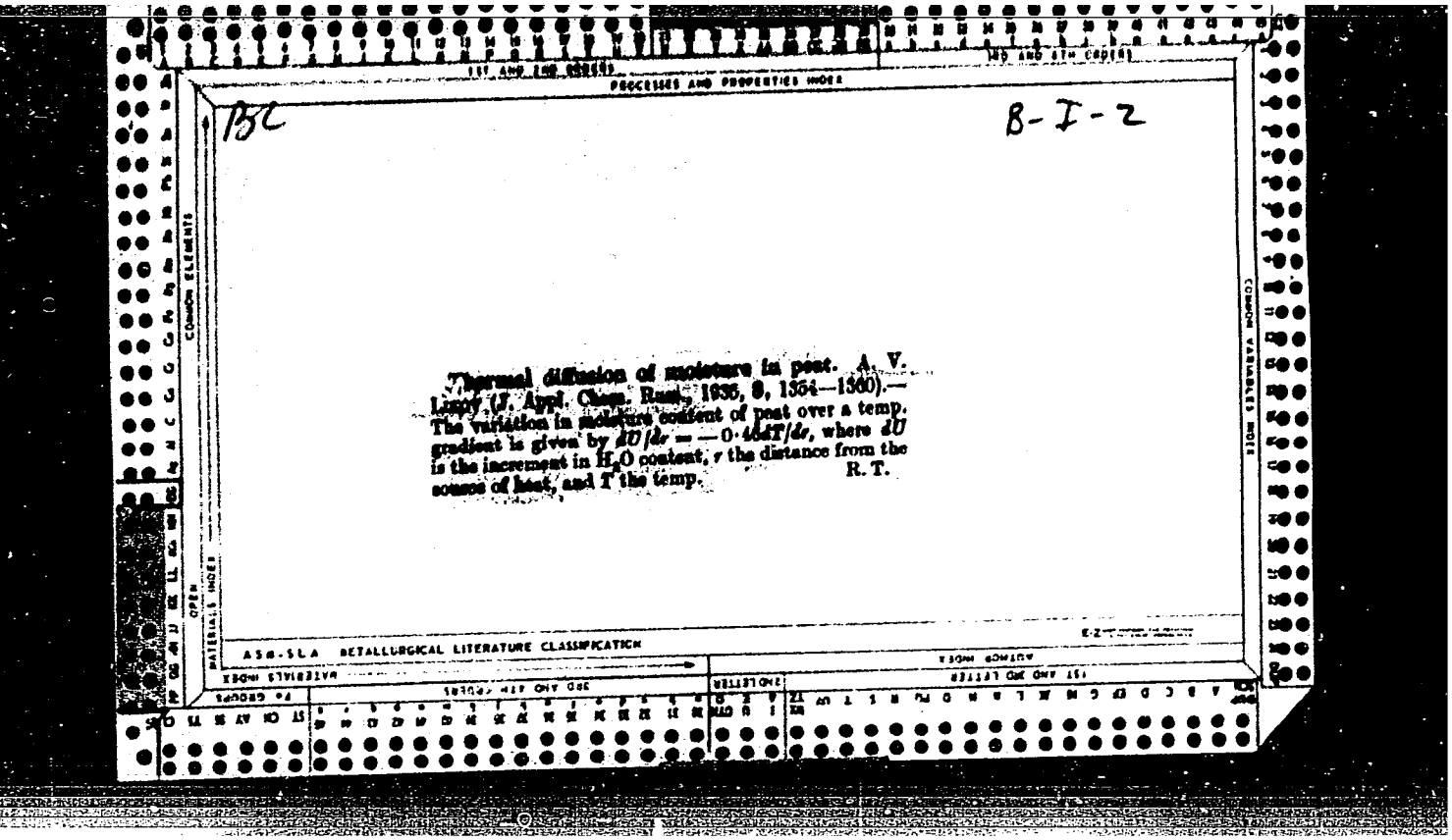

Thermal diffusion of moisture in peat. A. V. Lisov (J. Appl. Chem. Russ., 1936, 9, 1354—1360).— The variation in moisture content of peat over a temp. gradient is given by $dU/dr = -0{\cdot}46dT/dr$, where dU is the increment in H_2O content, r the distance from the source of heat, and T the temp. R. T.

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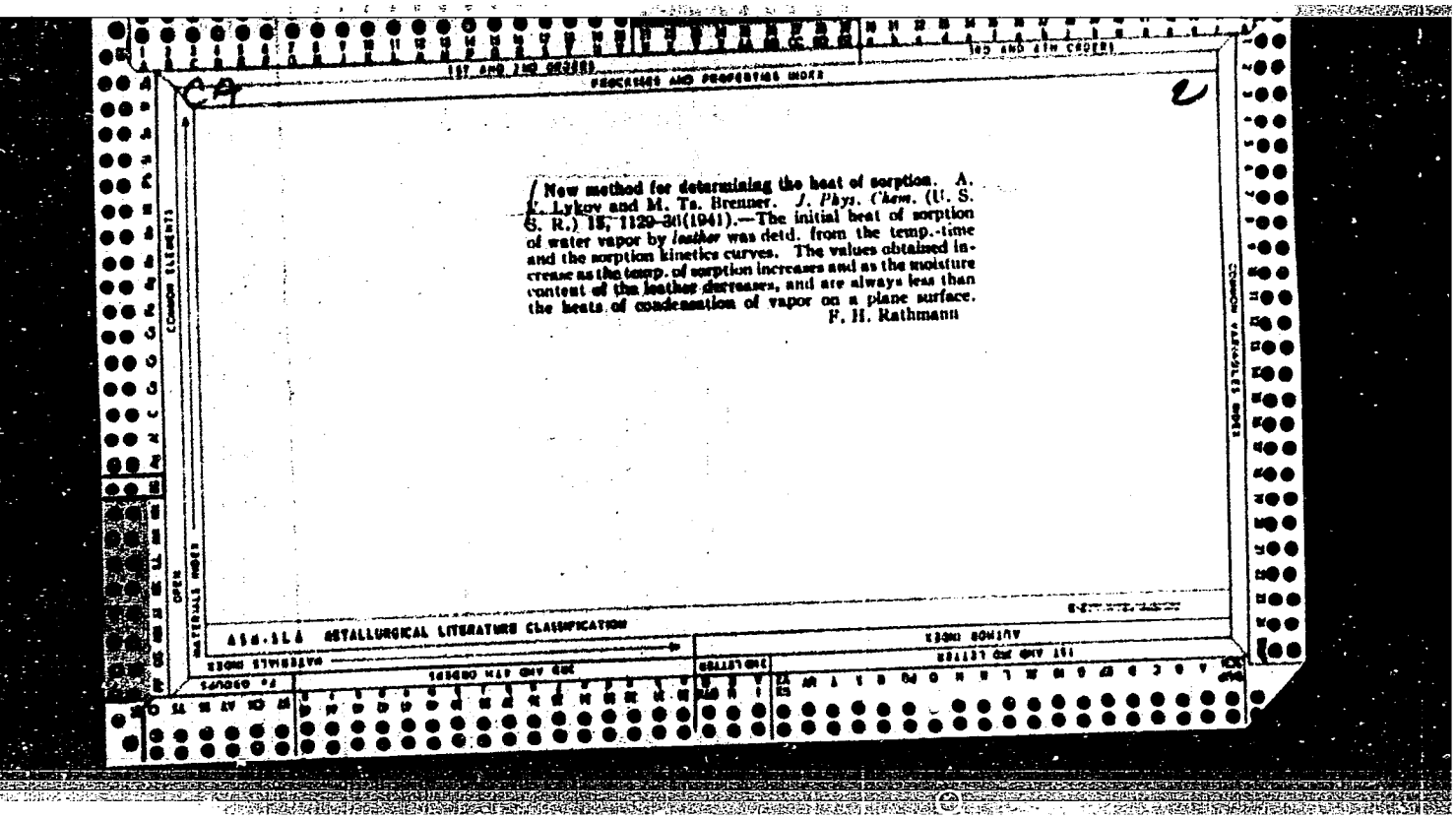

New method for determining the heat of sorption. A. V. Lykov and M. Ts. Brenner. *J. Phys. Chem.* (U. S. S. R.) 15, 1129–30(1941).—The initial heat of sorption of water vapor by *leather* was detd. from the temp.-time and the sorption kinetics curves. The values obtained increase as the temp. of sorption increases and as the moisture content of the leather decreases, and are always less than the heats of condensation of vapor on a plane surface.
F. H. Rathmann

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1. LYKOV A. V.

2. USSR (600)

4. Physics and Mathematics

7. Heat Conductivity of Nonstationary Processes, A. V. Lykov. (Moscow-Leningrad, State Power Press, L948). Reviewed by M. P. Vukalovich No 7 1949.

9. [redacted] Report U-3081, 16 Jan. 1953, Unclassified.

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"APPROVED FOR RELEASE: 08/31/2001 CIA-RDP86-00513R001031110015-8

LYKOV, A. V.

Lykov, A. V. On the theory of thermal waves. Izvestiya Akad. Nauk SSSR. Otd. Tekh. Nauk 1948, 1003–1008 (1948). (Russian)

Through the Laplace transformation, the author derives formally the temperature in an infinite plate of finite thickness, initially at temperature zero, whose faces are exposed to a medium whose temperture is oscillatory. Newton's law of surface heat transfer is assumed to hold at the faces. When conditions are specialized, he finds the known formula for temperature in a semi-infinite solid [Carslaw and Jaeger, Conduction of Heat in Solids, Oxford, 1917, p. 47; these Rev. 9, 188]. Results are also stated for the cylinder of infinite length and for the sphere. *R. E. Gaskell*

Source: Mathematical Reviews, Vol

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PA 13/49T11

USSR/Chemistry - Drying Jul/Aug 48
Chemistry - Porous Materials

"Theory of the Kinetics of the Drying Process of Colloido-Capillary Porous Bodies," A. V. Lykov, Tech Inst of Food Industry, Moscow, 16 pp

"Kolloid Zhur" Vol X, No 4

Shows that drying speeds depend on variations in the moisture exchange and moisture conduction coefficients, and on the moisture in colloido-capillary porous bodies, which are in the process of drying, i.e., on the form of a graph showing the relationship of moisture to matter. The first critical point of the curve representing drying speed corresponds either to

13/49T11

LYKOV, A. V.

USSR/Chemistry - Drying (Contd) Jul/Aug 48

the moment when the zone of evaporation inside that body begins to deepen (for drying of a capillary-porous body) or marks the moment when the surface of porous body) or marks the moment when the surface of the body reaches the moisture adsorbing point (for drying of colloidal bodies). Second critical point corresponds to the limit of adsorption related to combined and capillary moisture.

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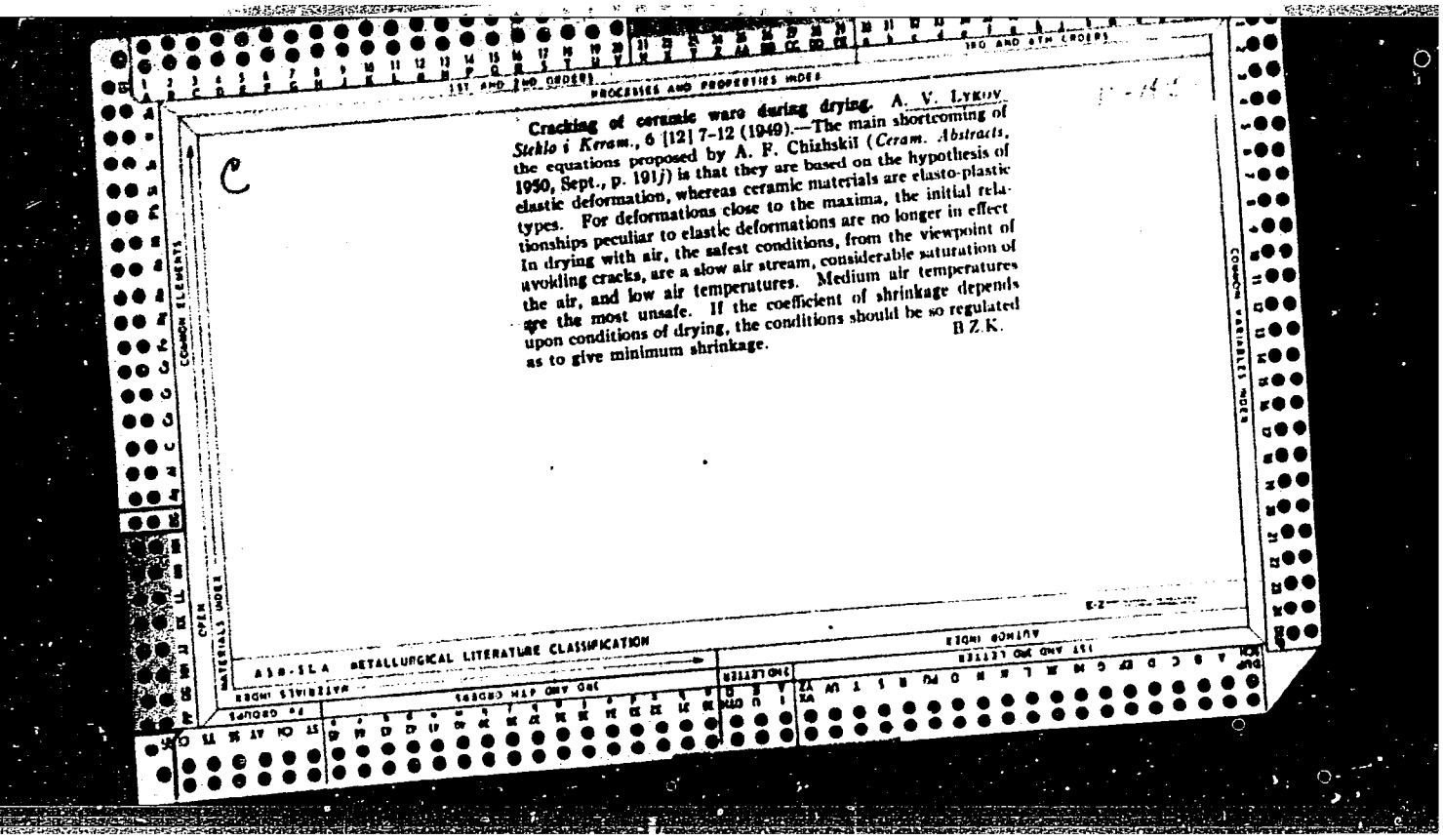

PROCESSES AND PROPERTIES INDEX

C

Cracking of ceramic ware during drying. A. V. Lykov. *Stekło i Keram.*, 6 [12] 7–12 (1949).—The main shortcoming of the equations proposed by A. F. Chizhskii (*Ceram. Abstracts*, 1950, Sept., p. 191*j*) is that they are based on the hypothesis of elastic deformation, whereas ceramic materials are elasto-plastic types. For deformations close to the maxima, the initial relationships peculiar to elastic deformations are no longer in effect. In drying with air, the safest conditions, from the viewpoint of avoiding cracks, are a slow air stream, considerable saturation of the air, and low air temperatures. Medium air temperatures are the most unsafe. If the coefficient of shrinkage depends upon conditions of drying, the conditions should be so regulated as to give minimum shrinkage.

B Z K.

A 1 8-5 L A METALLURGICAL LITERATURE CLASSIFICATION

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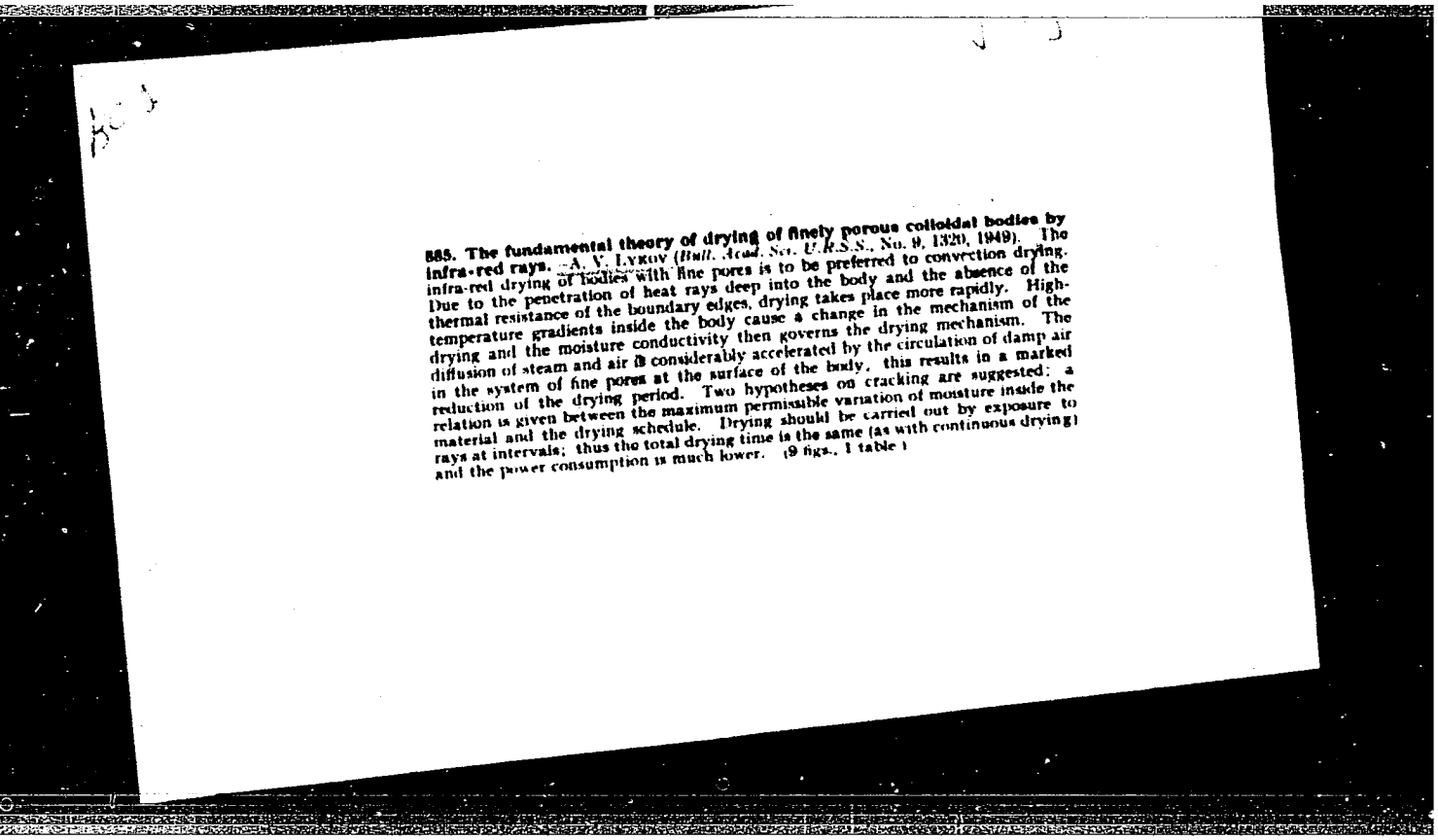

885. **The fundamental theory of drying of finely porous colloidal bodies by infra-red rays.** A. V. Lykov (*Bull. Acad. Sci. U.R.S.S.*, No. 9, 1320, 1949). The infra-red drying of bodies with fine pores is to be preferred to convection drying. Due to the penetration of heat rays deep into the body and the absence of the thermal resistance of the boundary edges, drying takes place more rapidly. High-temperature gradients inside the body cause a change in the mechanism of the drying and the moisture conductivity then governs the drying mechanism. The diffusion of steam and air is considerably accelerated by the circulation of damp air in the system of fine pores at the surface of the body; this results in a marked reduction of the drying period. Two hypotheses on cracking are suggested; a relation is given between the maximum permissible variation of moisture inside the material and the drying schedule. Drying should be carried out by exposure to rays at intervals; thus the total drying time is the same (as with continuous drying) and the power consumption is much lower. (9 figs., 1 table.)

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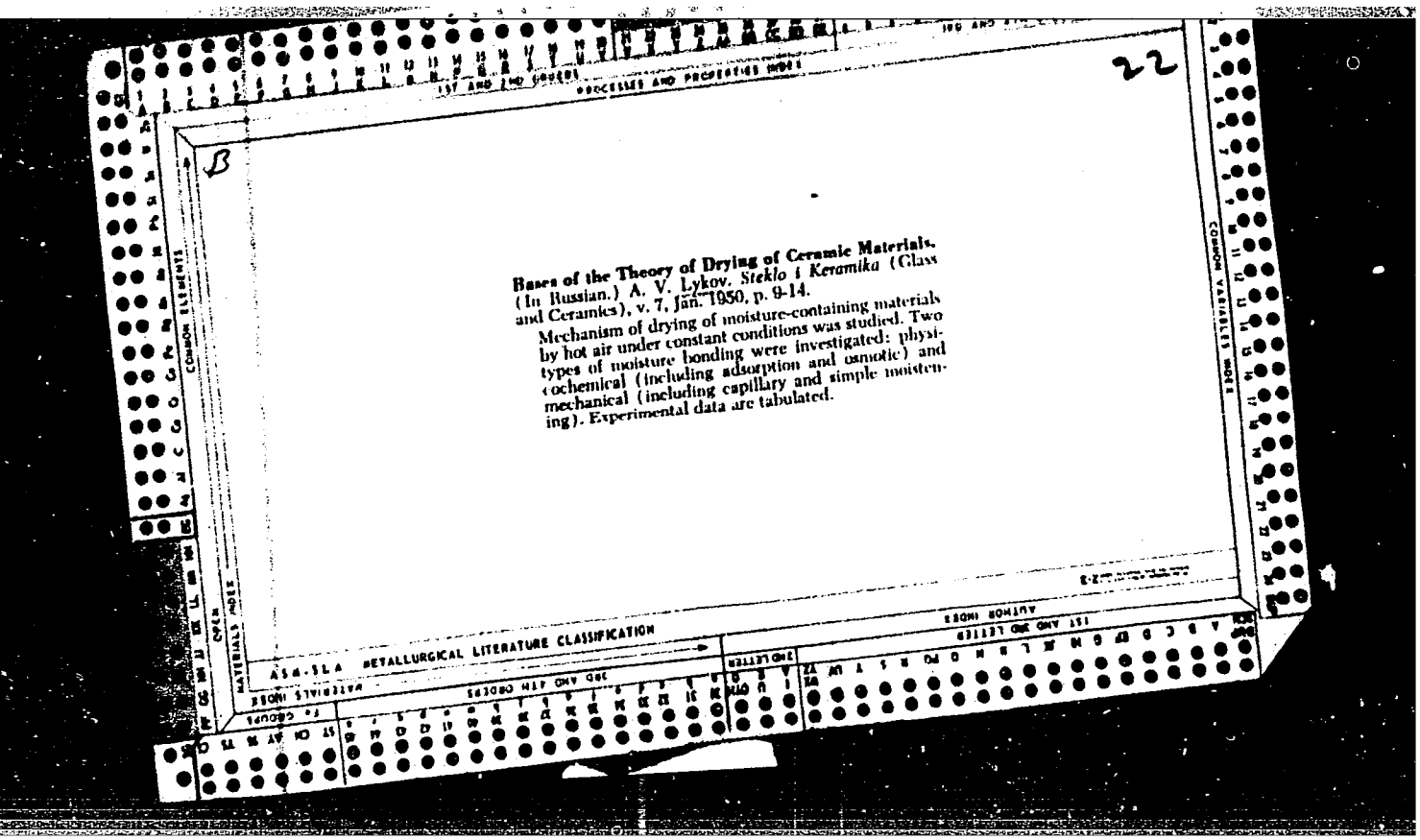

Bases of the Theory of Drying of Ceramic Materials. (In Russian.) A. V. Lykov. *Steklo i Keramika* (Glass and Ceramics), v. 7, Jan. 1950, p. 9-14.

Mechanism of drying of moisture-containing materials by hot air under constant conditions was studied. Two types of moisture bonding were investigated: physicochemical (including adsorption and osmotic) and mechanical (including capillary and simple moistening). Experimental data are tabulated.

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